

be removed to or below the streambed or finish ground line and the approaches shall be obliterated and stabilized to original or better than original conditions. The provisions of Section 104 - General Rights and Responsibilities, shall apply.

510.08 Method of Measurement Special detours will be paid by the lump sum.

510.09 Basis of Payment The accepted special detour will be paid for at the contract lump sum price which price shall be full compensation for the respective items, as called for in the contract, designed, constructed, maintained, completely removed and the affected areas rehabilitated and stabilized, including loaming, seeding and mulching.

When erosion control is required due to runoff from the detour roadway surface, erosion control will be paid under applicable contract items. Other erosion control work required for the special detour will not be paid for directly and all costs for such erosion control will be considered included in the lump sum payment for special detour. Traffic control devices, pavement, and dust control will be paid for under the applicable contract items.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
510.10 Special Detour, ____ meter [foot] Roadway Width Vehicular and Pedestrian Traffic Not Separated	Lump Sum
510.11 Special Detour, Pedestrian Traffic Only	Lump Sum
510.12 Special Detour, ____ meter [foot] Roadway Width Vehicular and Pedestrian Traffic Separated	Lump Sum

SECTION 511 - COFFERDAMS

511.01 Description This work shall consist of the complete construction, maintenance and removal of all cofferdams, caissons, cribs and sheeting, and other related work, including dewatering, required to allow for the excavation of

foundation pits and to permit and protect the construction of structural units, in accordance with these specifications.

511.02 Materials If requested, the Contractor shall submit for approval, plans showing the materials to be used and the proposed method of protecting the foundation construction. Construction shall not be started on cofferdams until such plans are approved. Approval of the plans shall not relieve the Contractor of the responsibility for the satisfactory functioning of the cofferdam.

511.03 Cofferdam Construction Cofferdams shall, in general, be carried well below the elevation of the bottom of footings, and shall be well braced and as watertight as necessary for the proper construction of the foundation. Unless it is contemplated that a concrete foundation seal will be placed under water, the interior dimensions of cofferdams shall be such as to give sufficient clearance for the construction and inspection of forms and to permit pumping outside of forms. Cofferdams shall be so constructed that sea water will not come in contact with concrete, as required in Section 502 - Structural Concrete.

During the placing of seal concrete, the elevation of the water inside the cofferdam shall be controlled to prevent any flow through the concrete.

No timber or bracing shall be used in cofferdams or cribs in such a way as to remain in the substructure masonry.

Cofferdams shall be constructed to protect fresh concrete against damage from the sudden rising of the waterbody and to prevent damage by erosion.

Unless otherwise provided, cofferdams or cribs, including all sheeting and bracing involved, shall be removed after the completion of the substructure, care being taken not to disturb or otherwise injure the finished masonry.

511.04 Pumping Pumping from the interior of any foundation enclosure shall be done in such a manner as to prevent any current of water that would carry away or segregate the concrete.

Pumping to dewater a sealed cofferdam shall not commence until the seal concrete has set sufficiently to withstand the hydrostatic pressure, but in no case will pumping be permitted until a minimum of 5 days has elapsed since the completion of the installation of the seal concrete, when the temperature of the waterbody outside the cofferdam is greater than 4°C [40°F], or a minimum of 7 days has elapsed since the completion of the installation of the seal concrete, when the

temperature of the waterbody outside the cofferdam is less than 4°C [40°F].

Procedures for the removal of all water and materials from cofferdams shall be described in the Soil Erosion and Water Pollution Control Plan as required in Section 656 - Temporary Soil Erosion and Water Pollution Control and accompanied Special Provision.

511.05 Method of Measurement Cofferdams will be measured as one lump sum unit, as indicated on the plans or called for in the contract.

511.06 Basis of Payment The accepted quantity of cofferdam will be paid for at the contract lump sum price for the respective cofferdam items.

When required, the elevation of the bottom of the footing of any substructure unit may be lowered, without change in the price to be paid for Cofferdams. However, if the average elevation of more than 25% of the area of the excavation is more than 1 m [3 ft] below the elevation shown on the plans, and if requested by the Contractor, then the entire cost of the cofferdam will be paid for in accordance with Section 109.7 - Equitable Adjustments to Compensation, instead of at the contract lump sum price.

All costs of constructing, maintaining, and removing a sedimentation basin, and pumping or transporting water and other materials to the sedimentation basin will not be paid for directly, but will be considered incidental to the cofferdam pay item(s).

All costs of related temporary soil erosion and water pollution controls, including inspection and maintenance, will not be paid for directly, but will be considered incidental to the cofferdam pay item(s).

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
511.07 Cofferdam	Lump Sum